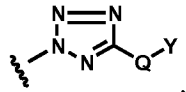
REMARKS/ARGUMENTS

Claims 1, 18, 27, 30, 36, 41, 50, 55 and 62 have been amended. Claims 71-73 have been canceled. Claims 78-87 have been added. Support for the amended claim 1 can be found on page 93, lines 29-30. Support for the phrase of "or a pharmaceutically acceptable salt, ester or prodrug thereof" in the amended claims 1, 27, 36, 41, 50, 55 and 62 can be found on pages 4-7. Claim 18 has been amended to correct an inadvertent antecedent basis issue. Claim 30 has been amended to include the W definition (otherwise it would be identical to claim 28). Support for the amended claim 62 can be found on page 27, line 10. Support for claim 78 can be found beginning on page 91, line 30 to page 91, line 1. Support for claim 79 can be found in claims 7, 9, 11, 18, 20, 22, 24, 41, and 55. Support for claim 80 can be found on pages 44 and 45. Support for claim 81 can be found in claims 18, 22, 24, 41 and 55. Claim 82 depends on claim 27. Claim 83 depends on claim 41. Claim 84 depends on claim 55. Claims 85-87 are old claims 71-73. The structures in the old claims 71-73 have been enlarged and clarified. The alleged ambiguity of the open oxygen atoms in claims 71-73, as pointed out by the Examiner, have been amended to explicitly illustrate the hydrogen atom. Support for such clarification can be found in tables 1-3, where G is OH. The Examiner has noted that the same formula has been used in claims 27 and 41; and the same formula has been used in claims 36 and 50 with different W definitions. It is unclear as to why the Examiner has pointed to this fact. It is common in chemical patent practice to use a single identifier (e.g., Formula I) to identify the identical formula in multiple claims. This common practice facilitates examination as it permits the Examiner to focus on the differences between the claims (i.e., the differences in the variable definitions). No new matter has been added by this amendment. Reconsideration is respectfully requested.

Response to Restriction Requirement/Election

In the restriction requirement, the Examiner has required restriction to one of the groups I-1 to XXXVIII-4 under 35 U.S.C. §121 and also to elect a species.

Applicants elect, with traverse, group I-1 and a species of claim 32, where A is

tBOC, G is OH, L is absent, W is  , where Q is absent and Y is 4-methoxyphenyl, and R^3 and R^4 are hydrogens (Example 45, pages 146-147). Claims 1-3, 15, 16, 21, 22, 27-32, 65-70, 74, 75, 78, 79, 81, 82, 85 read on the elected species.

The Examiner asserts that restriction between the various embodiments of Claim 1 because "they are not disclosed as capable of use together and they have different designs, modes of operation, and effects." The Examiner further states that the compounds have different core structures and different combinations of variables.

With regard to the first allegation, the compounds of the invention can be used together. See page 107, lines 4-27. Further, this fact would be readily apparent to the skilled artisan as the compounds share a common utility. With regard to the second allegation that the compounds have different designs, modes of operation and effect, the compounds have a similar design, as evidenced by the common core structure and, presumptively, possess a common mode of operation and effect as anti-HCV agents. Thus, the provisions of the MPEP relied upon in support of the restriction requirement are simply not met.

The MPEP states that restriction within a generic chemical claim can be made when the compounds lack unity of invention. MPEP Section 803.02. In this case, Applicants submit that the foregoing restriction requirement is improper because the unity of invention exists in the present claims. The compounds of present invention possess a common tricycle macrocylic pharmacophore (i.e., a substantial common core structure) and possess a common utility as anti-HCV agents. The Examiner asserts that there is no common core due to the presence of variables.

This restriction requirement is, in essence, a refusal to examine the claimed invention (e.g., Claim 1).

As explained in MPEP §803.02, the USPTO cannot refuse to examine that which applicants deem to be their invention unless the subject matter lacks unity of invention. In re Weber, 198 USPQ 328 (CCPA 1978) and In re Haas, 198 USPQ 334 (CCPA 1978). Unity of invention exists where components in a Markush group share common utility and share a substantial structural feature disclosed as being essential to that utility. In re

Harnisch 206 USPQ 300 (CCPA 1980). In Harnisch, the court reversed a rejection of a claim to a group of coumarin compounds, stating that the compounds were structurally similar and functionally similar because all were dyestuffs, a classification which was determined to not be repugnant to scientific classification. Like in Harnisch, all of the compounds of the present application are structurally similar (i.e., they are all tricycle macrocyles containing a significant number of common atoms) and are functionally similar (i.e. they all have anti-HCV activity). The fact that the common core has variables does not destroy the fact that a common core exists. Harnisch.

This restriction is aggravated by the fact that the Examiner's restriction does not allow election or a means for examination for the scope of the claim, even in a piecemeal fashion. That is, in spite of the fact that the Examiner has listed forty seven groups of compounds, a substantial number of compounds do not fall into any of these groups. For example, the restricted groups for variable A do not include $-(C=O)O-R^1$, except where R^1 is a tert-butyl or a cyclic group (e.g., compounds where R^1 is alkyl other than t-butyl) are not provided. Compounds where A is $-(C=O)-R^2$, $-(C=O)NH-R^2$, $-(C=S)-NH-R^2$, $-S(O)_2-R^2$, $-(C=NR^1)R^1$, and $-(C=NR^1)-NHR^1$, other than when W is a pyrrole or an imidazole. Compounds where G is an amine or sulfonamide other than $NHS(O)_2$-phenethyl or NH-phenethyl (e.g., benzylsulfonamide) have not been provided. It appears that the groups restricted by the Examiner are limited to the compounds listed in tables 1-3. The permutations created by the Examiner are not fully inclusive of the scope of the present invention. This is clearly improper.

Applicants respectfully traverse this restriction requirement and request that the full scope of the invention be examined.

With respect to the restriction requirement between the product and their methods of use, Applicants respectfully traverse. The Examiner asserts that the compounds would be useful to treat depression. There is no evidence of record to suggest that this is true.

Further, it is submitted that no unreasonable burden is incurred by the search for process of product when the product search has been carried out.

For the reasons discussed above, Applicant's respectfully submit that the groups and species elections are improper. Applicants respectfully request that all groups and species

be rejoined for examination and the requirement for election between groups and species be withdrawn.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 251-3509.

Respectfully submitted,

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